

Atty. Dkt. No. 037768-0109  
Appl. No. 10/724,158  
Reply to Office action of 04-20-2005

**Amendments to the Drawings:**

The attached drawing sheet includes changes to Figure 1. This sheet, which includes Figure 1 only, replaces the original sheet including Figure 1 only. In Figure 1, previously omitted element 112 has been added.

APPENDIX: Replacement Sheet; and  
Annotated Sheet Showing Changes.

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### **REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 1-20 remain in this application and claim 1 is amended herewith. Claims 21-22 are added by this amendment. New claims 21-22 are supported, e.g., at least at paragraphs 85 and 130-136.

#### **Claim For Priority**

The benefit of priority as to the claim was not accorded. Applicant does not necessarily agree with this position and reserves the right to show otherwise if desirable.

#### **Status of Applications**

The applications cited in the Specification have been searched on PAIR and their respective Application Publication Numbers, patent numbers, etc. were inserted along with their status. See amended paragraphs 4, 53, 70, and 74-75. Thus, this objection should be withdrawn.

#### **Objections to the Drawings**

The drawing was objected to for two reasons, each of which will be addressed under a separate heading.

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***First Objection***

The drawing was objected to as failing to comply with 37 C.F.R. § 1.84(p)(5), because it includes the following reference characters not mentioned in the description: Numbers 102 and 104. Office action page 2. Corrected drawing sheets in compliance with 37 C.F.R. § 1.121(d) or an amendment to the specification to add the reference characters in the description in compliance with 37 C.F.R. § 1.121(b) were required in reply to the Office action to avoid abandonment of the application. Office action page 2. Rather than amend the drawing, the present specification was amended at paragraph 58. Thus, the present objection should be withdrawn.

***Second Objection***

The drawing is objected to as failing to comply with 37 C.F.R. § 1.84(p)(5), because it does not include the following reference signs mentioned in the description: Reference number 112 in paragraph [0065]. Office action page 3. A corrected drawing sheet in compliance with 37 C.F.R. § 1.121(d) was required in reply to the Office action to avoid abandonment of the application. Office action page 3.

The "Replacement Sheet" avoids this issue, because it refers to 112, and the objection should be withdrawn.

The Examiner is respectfully requested to indicate whether or not she accepts the "Replacement Sheet" in the next action.

**Obviousness Double Patenting**

Various claims were rejected under the doctrine of obviousness-type double patenting. Office action pages 3-5. Each rejection is avoided by a terminal disclaimer filed herewith.

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Specifically, claims 1-3, 8-12, 15, 16, and 18-20 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 8, 12, 16, and 22-27 of copending Application No. 10/441,501. Office action pages 3-4.

Claims 1-3, 8, 9, 10-12, 15, 16, and 18-20 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 6, and 7 of U.S. Patent No. 6,830,822. Office action page 4.

Claims 1, 9, 10, 12, and 18-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 6-9 of U.S. Patent No. 6,849,109. Office action page 4.

The terminal disclaimer renders each of the present rejections moot. Thus, each rejection should be withdrawn.

**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1, 2, 6, 8, 10, 12, 15, and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 4,539,047. A reference anticipates a claim if and only if the reference describes the claim or an embodiment falling within the scope of the claim. MPEP § 2131.

Here, the independent claim 1 has been amended to more clearly point out the claimed invention. It is submitted that '047 does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. The multifunctionality is neither obvious nor inherent in every nanoscale additive; for example, it is known in the art that calcium carbonate nanoparticles as additives do not enhance the non-optical properties of a plastic. Thus, this rejection should be withdrawn.

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**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1-3, 10, 12, 15, and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 4,629,513. Here, the independent claim 1 has been amended to more clearly point out the claimed invention. While '513 teaches pigments comprising two metals (e.g. zinc ferrite), it is submitted that '513 does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1, 7, 9, 13, and 17-19 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 4,927,466. Here, the independent claim 1 has been amended to more clearly point out the claimed invention. It is submitted that '466 teaches organic pigments such as azo pigments and that it does not teach or offer any motivations for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1, 2, 6, 8, 10, 12, 14, 15, and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 5,368,640. Here, the independent claim 1 has been amended to more clearly point out the claimed invention. The '640 reference teaches single metal oxides such as iron oxide. It is submitted that '640 does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

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**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1, 2, 5, 10, 11, 12, 14, 15, and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 6,060,154. Here, the independent claim 1 has been amended to more clearly point out the claimed invention. It is submitted that '154 does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

**Claim Rejections-35 U.S.C. § 102(b)**

Claims 1, 2, 6, 7, 9, 11, 12, and 17-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 6,110,266. Here, the independent claim 1 has been amended to more clearly point out the claimed invention. While '266 teaches ink compositions, it is submitted that '266 does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

**Claim Rejection – 35 U.S.C. § 103(a)**

Claims 1, 4, 10, 12, 16, and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,164,007. Office action page 8. The rejection reads as follows:

“This reference teaches cement colored with a manganese ferrite pigment. The cement is colored with the ferrite by mixing the pigment with the components of the cement and the pigment is bonded to the cement when it is set. The pigment has a particle size in the range of 0.1-1 microns (col. 2, lines 3-4), which overlaps the defined size of 'nanopigment' which is less than 250 nm. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious [cites committed]. Therefore, one of ordinary skill in the art would expect the taught pigment to have a packing number that overlaps the claimed range absent any showing to the contrary.”

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Office action page 8.

It is submitted that the '007 patent does not teach or offer any motivation for methods to form compositions of matter comprising nanopigments that simultaneously comprise two or more metals and are multifunctional, amongst other features of the claim. Thus, this rejection should be withdrawn.

### **Conclusion**

In view of all of the above, claims 1-22, as amended, are believed to be allowable and the case to be in condition for allowance, which action is respectfully requested. The references that were cited and not relied upon are believed to be no more pertinent than those references that were relied upon.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 10-20-2005

By 

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 295-4166  
Facsimile: (202) 672-5399

Sean A. Passino  
Attorney for Applicant  
Registration No. 45,943

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 Amdt. Dated Oct. 20, 2005  
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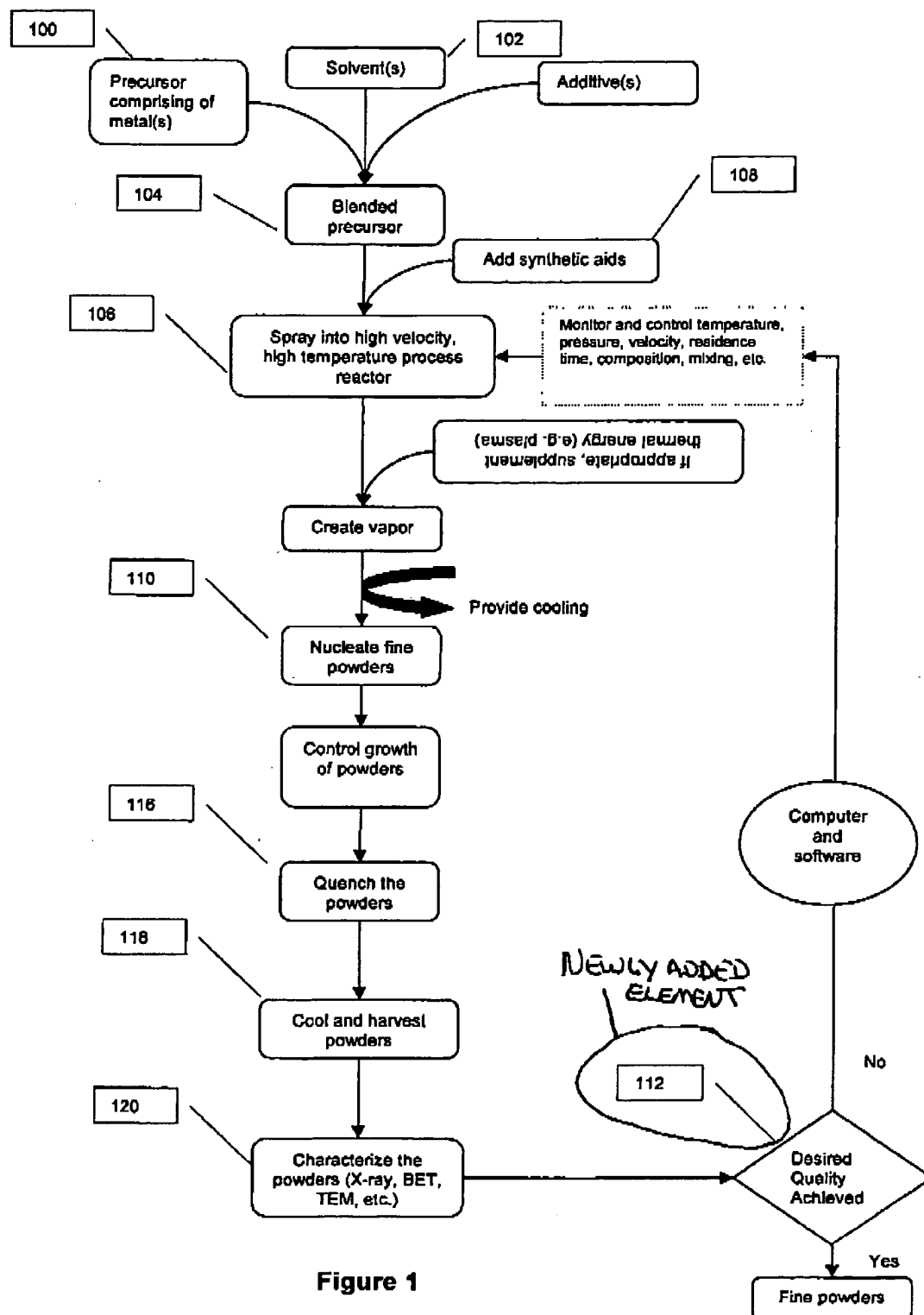


Figure 1